Single Board Diagnostic Tools

- There have been developped a number of different diagnostic or simple board operation programs/tools. Just to name a few (with some inevitable omission):
  - AMS/HB/MRG/SC “menu” programs
    - ✓ menu driven command
    - ✓ some board specific diagnostic tool
    - ✓ text based user interface
    - ✓ simple VISION calls from host with old style vmesvt library
    - ✓ does not allow for multi board test
  - CDFVME/SVTDAQ
    - ✓ Graphic widget driven commandsm with Java GUI
    - ✓ vme code to be executed on crate through cumbersome CORBA(ROBIN) mechanism
    - ✓ allows for multi board test once some configuration files are provided.
    - ✓ Java programming of most of the useful features
  - Various scattered test programs written mostly in C (random test, spy buffer checks) plus some Python from Bill
    - ✓ Not verry easy to mantain not at all flexible and robust enough..

What's new

- Since last summer:
- SVTVME introduced (gives a uniform C library to manipulate all the SVT boards)
- SVT has been taking its final shape
- Thomas has left...

There is a need for a single "expert level" program that allows:

- Access to all the SVT board in some uniform way (an interface to the underlying SVTVME library).
- Diagnostic in situ of single boards (test rams/fifos/register and so on)
- Diagnostic of single boards using standard cabling for input output of test data
- Diagnsostic oc SVT slices? (random test)

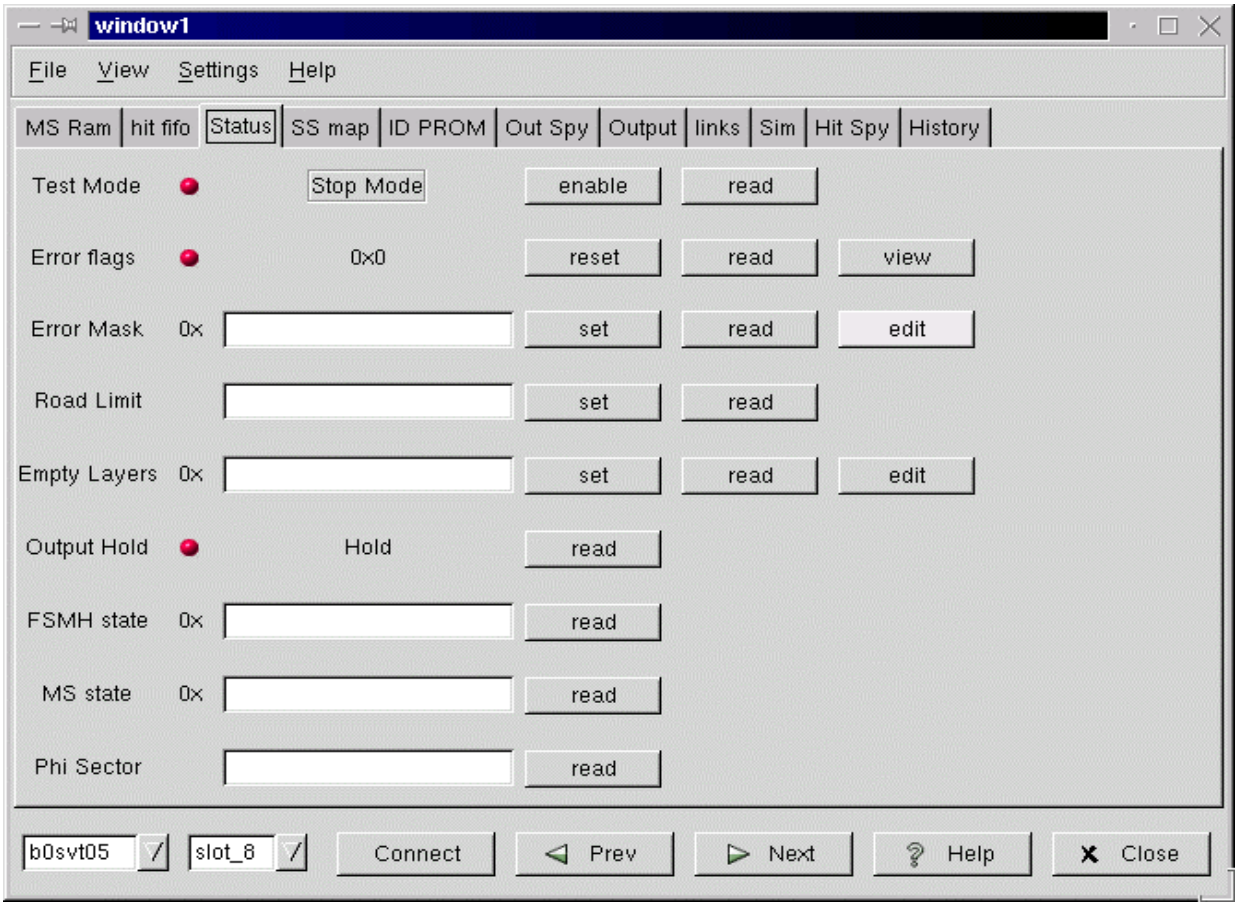
Subir has been working on reviving much of the Thomas Java code to use SVTVME and/or trying to come up with a totally new GUI: The GNOME GTK+ library...

GNOME/GTK+

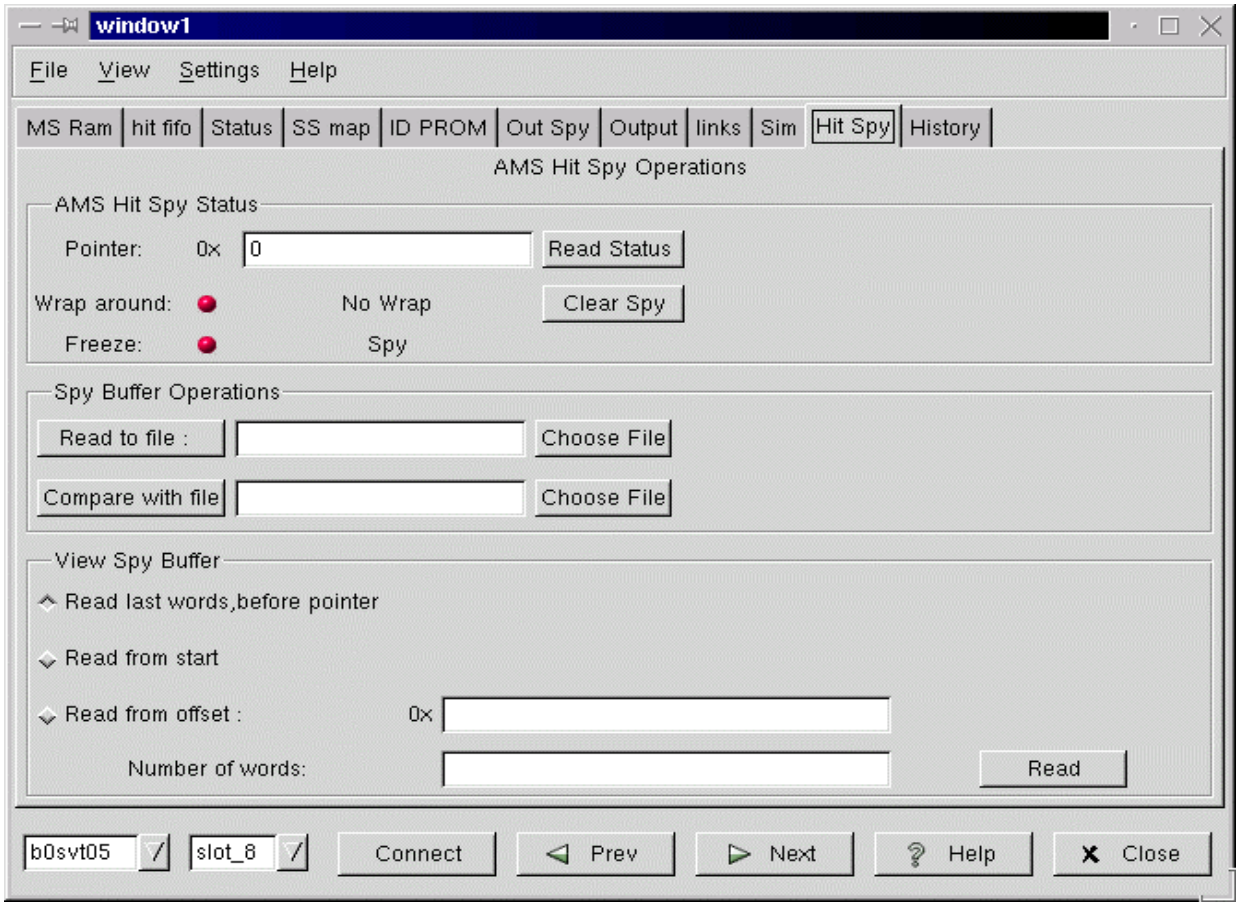
- A big plus of GNOME GTK+ would be, for the prevailing attitude among us, that is totally written in C i.e. We will end up with a totally C written diagnostic program with a graphic interface
- GNOME GTK+ is the basis of the GNOME desktop projects and so is likely to have support in the mid term future.
- GNOME GTK+ is not installed as a default in the Red Hat 6.1 release which forms the basis of the Fermi current version.
- Waiting some input from Jim Patrick about the possibility of having this installed and supported in the near future
- Stefano/Luciano very positively welcome this development with few suggestions he his now trying to follow for some preliminary version to be released soon.
- Good basis for doing some medium priority work later this year when all “the expert” will be together to suggest the most useful design and to provide diagnostic tools to be integrated in the program.

GNOME/GTK+

Alex Barchiesi wrote a little demo basing the layout on the SVTDAQ/AMS class.



GNOME/GTK+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